

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1336119

Luminaire Tested: P3A02R459740DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R459740DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

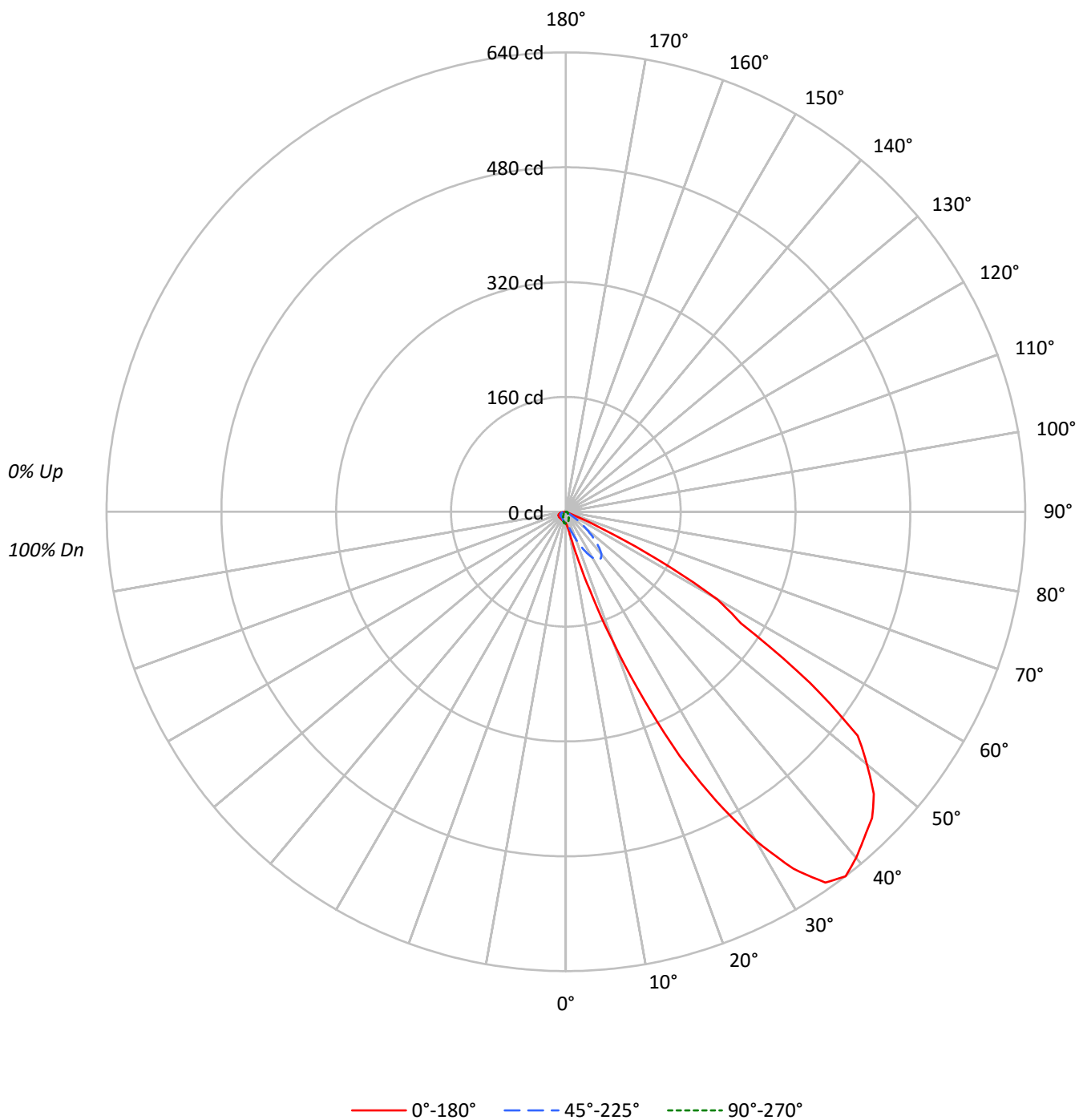
Lumens per Lamp: N/A
Luminaire Lumens: 286.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3618	3618	3618	3618	3618
5°	4314	4006	3588	3324	3324
10°	6903	4676	3362	3162	3162
15°	17162	6266	3065	2951	3065
20°	45224	9381	2637	2824	2987
25°	90804	13888	2299	2637	2928
30°	133843	18610	1848	2583	2988
35°	168834	21817	1579	2543	3105
40°	180137	22041	1431	2634	3321
45°	187151	18390	1333	2853	3597
50°	186877	12827	1296	3070	4025
55°	158809	5696	1338	3441	4435
60°	106746	1140	1360	3815	5087
65°	28330	467	1349	4151	5759
70°	769	577	1346	4552	6540
75°	593	593	1440	4829	7371
80°	631	884	1515	5051	8334
85°	503	1258	2264	5284	8303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 191987 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.6
10°-20°	8.1	2.8
20°-30°	33.3	11.6
30°-40°	70.1	24.5
40°-50°	86.5	30.3
50°-60°	64.8	22.7
60°-70°	16.7	5.8
70°-80°	3.5	1.2
80°-90°	1.4	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	43.0	15.0
0°-40°	113.1	39.5
0°-60°	264.5	92.5
0°-90°	286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	286.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	20	18	16	15	15	2
15°	76	28	14	13	14	28
25°	375	57	10	11	12	175
35°	631	82	6	10	12	384
45°	604	59	4	9	12	462
55°	415	15	4	9	12	359
65°	55	1	3	8	11	79
75°	1	1	2	6	9	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
2.5°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.3	17.0	16.5	16.1
5°	19.6	19.4	19.4	19.4	19.1	18.9	18.9	18.2	17.3	16.3	15.6
7.5°	23.2	23.2	22.9	22.4	22.2	21.7	21.3	19.4	17.3	15.8	14.9
10°	31.0	30.5	29.8	29.3	28.1	26.5	25.3	21.0	17.0	15.1	14.4
12.5°	46.3	47.3	44.9	42.5	39.2	36.2	32.4	23.9	17.0	14.4	13.7
15°	75.6	77.3	72.8	68.1	60.0	52.5	45.4	27.6	16.5	13.5	12.8
17.5°	123.6	125.7	118.2	107.1	94.5	79.4	66.4	32.8	16.1	12.5	12.1
20°	193.8	193.5	178.9	164.9	140.8	118.6	94.3	40.2	15.4	11.3	11.3
22.5°	280.0	281.0	263.0	238.0	203.7	168.0	129.3	48.7	14.4	10.4	10.6
25°	375.3	367.2	346.0	315.5	271.8	222.4	171.3	57.4	13.5	9.5	9.9
27.5°	454.7	446.9	422.5	386.4	339.3	280.7	214.1	66.2	12.3	8.5	9.2
30°	528.6	518.7	489.4	448.5	392.5	329.2	254.3	73.5	10.9	7.3	8.5
32.5°	589.6	580.6	547.3	499.8	438.8	370.8	288.3	79.2	9.5	6.6	8.0
35°	630.7	621.5	590.8	538.6	472.2	401.0	316.0	81.5	8.3	5.9	7.8
37.5°	640.2	635.2	613.2	564.3	495.1	420.4	333.7	80.8	6.9	5.4	7.3
40°	629.3	630.5	620.1	579.4	507.4	428.7	341.0	77.0	5.7	5.0	7.1
42.5°	615.4	618.4	617.7	585.6	512.6	429.1	337.9	69.5	4.5	4.5	6.9
45°	603.5	606.6	610.9	583.0	509.0	423.0	328.2	59.3	3.3	4.3	6.9
47.5°	582.0	585.4	591.5	562.2	491.1	407.2	310.8	48.2	2.4	4.0	6.6
50°	547.8	549.4	547.8	514.9	456.6	381.6	282.4	37.6	1.7	3.8	6.6
52.5°	512.6	509.3	495.6	454.0	401.7	341.2	246.7	26.7	1.2	3.5	6.4
55°	415.4	410.2	400.1	374.6	344.8	291.6	199.4	14.9	1.2	3.5	6.1
57.5°	289.5	292.3	295.9	290.7	277.0	229.7	151.5	6.6	1.2	3.3	6.1
60°	243.4	241.0	241.3	238.0	215.3	167.5	104.2	2.6	1.2	3.1	5.9
62.5°	145.3	147.0	150.1	150.8	128.3	93.6	54.6	1.2	1.2	2.8	5.7
65°	54.6	57.2	50.1	43.5	34.5	25.3	12.8	0.9	1.4	2.6	5.2
67.5°	1.7	1.9	2.4	2.1	2.1	1.9	1.4	0.9	1.4	2.4	5.0
70°	1.2	1.2	1.2	1.2	1.2	0.9	0.9	0.9	1.2	2.1	4.5
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.2	1.9	4.0
75°	0.7	0.9	0.7	0.7	0.7	0.7	0.7	0.7	1.2	1.7	3.3
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	1.4	2.8
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	1.2	2.4
82.5°	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.5	0.9	0.9	1.9
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.9	1.2
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.5	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	16.5	16.5	16.5
2.5°	15.6	15.6	15.6
5°	15.1	15.1	15.1
7.5°	14.7	14.7	14.7
10°	14.2	14.2	14.2
12.5°	13.7	13.7	13.9
15°	13.0	13.5	13.5
17.5°	12.5	13.0	13.2
20°	12.1	12.5	12.8
22.5°	11.3	12.1	12.5
25°	10.9	11.8	12.1
27.5°	10.4	11.6	12.1
30°	10.2	11.3	11.8
32.5°	9.7	11.1	11.6
35°	9.5	11.1	11.6
37.5°	9.5	10.9	11.6
40°	9.2	10.9	11.6
42.5°	9.2	10.9	11.6
45°	9.2	10.9	11.6
47.5°	9.0	10.9	11.8
50°	9.0	11.1	11.8
52.5°	9.0	11.1	11.8
55°	9.0	11.1	11.6
57.5°	8.7	10.9	11.6
60°	8.7	10.9	11.6
62.5°	8.3	10.6	11.3
65°	8.0	10.4	11.1
67.5°	7.6	10.2	10.6
70°	7.1	9.5	10.2
72.5°	6.4	9.0	9.7
75°	5.7	8.3	8.7
77.5°	5.0	7.3	7.8
80°	4.0	6.1	6.6
82.5°	3.1	4.7	5.0
85°	2.1	3.1	3.3
87.5°	0.9	1.4	1.7
90°	0.0	0.0	0.0

(END OF REPORT)